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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,177	04/14/2004	Pablo Castro	Msft-3018/307735.01	6346
41505 7590 08/08/2007 WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION) CIRA CENTRE, 12TH FLOOR 2929 ARCH STREET PHILADELPHIA, PA 19104-2891			EXAMINER PANTOLIANO JR, RICHARD	
			ART UNIT 2194	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/824,177

Applicant(s)

CASTRO ET AL.

Examiner

Richard Pantoliano Jr

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21,23-25 and 28-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21,23-25 and 28-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

DETAILED ACTION

Response to Amendment

1. This Office Action is filed in response to amendments filed on **25 May 2007** in regard to Application# **10/824,177**. **Claims 1-20, 22, 26 and 27** have been cancelled and **Claims 21, 23-25, and 28-37** are currently pending and have been considered below.

Claim Objections

2. **Claims 21 and 23-25** are objected to because of the following informalities:
- a) **Claim 21**, lines 16-17: The phrase "...wherein upon invocation said..." should be either "...wherein upon **invoking** said..." or "...wherein upon **invocation of** said..."; and
 - b) **Claims 23-25**: These claims are listed as being dependent on cancelled **Claim 22**.
3. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 21, 23-25 and 28** are rejected under 35 U.S.C. 102(b) as being anticipated by Noble et al (US Pat: 5,822,585).

6. As to **Claim 21**, Noble discloses the invention substantially as claimed including a computer readable medium bearing instructions comprising:

a) instructions for providing an application programming interface ("API") for an application that requests a database operation (Col. 3, lines 36-55; Col. 4, lines 43 and Col. 11, lines 1-30), said API comprising:

I) instructions for an initialization method that is invoked by said application to request said database operation, wherein said initialization method initiates a return communication to said application without waiting for any external event, said return communication allowing the application to continue executing without waiting for results from said database operation (Col. 6, line 58-Col. 7, line 12; Col 10, lines 46-54; and Col. 11, lines 1-30) (The executing of the CallContext object by the agent object meets this claim limitation);

II) instructions for signaling an application when a database operation is complete (Col. 6, line 58 – Col. 7, line 13) (Messages are exchanged in the system via message objects, thereby meeting this claim limitation).; and

III) instructions for a finalization method that can be invoked by said application, in response to said signaling, to obtain any results of said database operation (Col 11, line 30 – Col 12, lines 19) (The "Notify()" function meets this claim limitation), wherein upon invocation said finalization method:

1) prepares database results for said application (Col. 11, lines 1-65) (The "Notify()" method must retrieve the information from the Callback

object before the client can utilize said information, thus meeting this claim limitation); and

2) returns said database results to said application (Col 11, Line 30 – Col 12, lines 19).

7. As to **Claim 23**, Noble further teaches wherein said return communication comprises an event object that can be signaled when said database operation completes (Col. 6, line 58-Col. 7, line 12; Col 10, lines 46-54; and Col. 11, lines 1-30) (The executing of the CallContext object by the agent object meets this claim limitation).

8. As to **Claim 24**, Noble further teaches wherein said return communication comprises an object with a Boolean flag that can be signaled when a said database operation completes (Col 11, line1 – Col 12, line 38).

9. As to **Claim 25**, Noble further teaches wherein said initialization method maintains a callback function for notifying a thread when said database operation completes (Col 11, lines 1-55).

10. As to **Claim 28**, Noble further teaches wherein the said API further comprises instructions for an open connection method that allows a client application to open a database connection asynchronously (Col. 7 line53 – Col 8, line 5).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claims 29-37** are rejected under 35 U.S.C. 103(a) as being unpatentable over Noble in view of Edwards et al (US Pat: 5,689,697), hereinafter Edwards.

13. As per **Claim 29**, Noble further discloses the system of **Claim 21** wherein the API provides a method that allows a client application to execute asynchronously (Col. 6, line 58-Col. 7, line 12; Col 10, lines 46-54; and Col. 11, lines 1-30). Noble does not explicitly teach wherein a Structured Query Language ("SQL") statement is executed by the client.

14. Edwards discloses wherein SQL statements are executed asynchronously by a client application (Col. 3, lines 26-53).

15. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system disclosed by Noble with the teachings of Edwards. One would have been motivated by the fact that SQL is old and well-known as the preferred language for relational database systems (Edwards; Col 1, lines 46-55). In order to ensure that the system disclosed by Noble could be utilized within database architectures utilizing well-known techniques, one would include support for the most

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popular method of implementing said architectures, the SQL language, within Noble's system.

16. As to **Claim 30**, Noble discloses the invention substantially as claimed including a computer equipped with software implementing an asynchronous database Application Programming Interface ("API") allowing a client application to open a database connection asynchronously, said API comprising:

a) instructions for an initialization method, wherein said initialization method is invokable by a client thread to request a database operation, wherein upon invocation said initialization method (Col. 6, line 58-Col. 7, line 12; Col 10, lines 46-54; and Col. 11, lines 1-30) (The executing of the CallContext object by the agent object meets this claim limitation):

I) initiates a return communication with the client thread without waiting for any external event (Col. 6, line 58-Col. 7, line 12; Col 10, lines 46-54; and Col. 11, lines 1-30);

II) validates input parameters for a database operation (Col. 6, line 58-Col. 7, line 12) (The fact that the parameters are "strongly typed" means that the system checks to ensure that the parameters passed match up to the exact type that is required for the necessary operation, thereby meeting this claim limitation);

III) sets up a database operation by generating database instructions based on data passed to the initialization method (Col. 6, lines 34-51); and

IV) sends a request for said database operation to a database server (Col. 6, line 58-Col. 7, line 12; Col 10, lines 46-54; and Col. 11, lines 1-30);

b) instructions for signaling said client thread when said database operation is complete (Col. 6, line 58 – Col. 7, line 13);

c) instructions for a finalization method that can be invoked by said client thread, in response to said signaling, to obtain any results of said database operation, wherein upon invocation said finalization method:

I) prepares database results for said client thread (Col. 11, lines 1-65)
(The "Notify()" method must retrieve the information from the Callback object before the client can utilize said information, thus meeting this claim limitation); and

II) returns said database results to said client thread (Col. 11, lines 1-65);
and

d) wherein said instruction for an initialization method and said instructions for a finalization method are stored on a computer readable medium accessible by said computer (Col 11, line 30 – Col 12, lines 19) (The "Notify()" function meets this claim limitation).

17. Noble does not explicitly teach wherein said database operation comprising at least one instruction to execute a Structured Query Language ("SQL") statement.

18. Edwards discloses wherein said database operation comprising at least one instruction to execute a Structured Query Language ("SQL") statement (Col. 3, lines 26-53).

19. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the system disclosed by Noble with the teachings of Edwards. One would have been motivated by the fact that SQL is old and well-known as the preferred language for relational database systems (Edwards; Col 1, lines 46-55). In order to ensure that the system disclosed by Noble could be utilized within database architectures utilizing well-known techniques, one would include support for the most popular method of implementing said architectures, the SQL language, within Noble's system.

20. As to **Claims 31-33**, these claims are rejected for the same reasoning as provided for **Claims 23-25** above.

21. As to **Claims 34-37**, being directed to the method implemented by the instructions of the computer readable medium of **Claims 30-33**, respectively, these claims are rejected for the same reasoning as applied to **Claims 30-33**.

Response to Arguments

22. Applicants' arguments filed 25 May 2007 have been fully considered but they are not persuasive.

23. As to **Claim 21**, Applicants' argue that the cited prior art fails to teach "...a finalization method that can be invoked by said application, in response to said signaling...". However, as noted in the prior art rejection, above, Noble discloses a

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finalization method in the form of the "Notify()" method. Therefore, the claim stands rejected.

24. Since the rejections of **Claims 23-25, and 28-37** were argued for the same reasoning as that applied to **Claim 21**, these claims stand rejected for the same reasoning.

Conclusion

25. Examiner has cited particular columns and line numbers and/or figures in the references as applied to the claims for the convenience of the applicant. Applicant is reminded that rejections are based on references as a whole and not just the cited passages. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the cited art or disclosed by the examiner.

26. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

27. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Pantoliano Jr whose telephone number is (571) 270-1049. The examiner can normally be reached on Monday-Thursday, 8am - 4 pm EST.

29. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571)272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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30. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RP
07/23/07


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER